

## **Helen (Nell) Rehn**

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### **OBJECTIVE**

A full-time position that allows me to work with emerging technologies.

### **EDUCATION**

#### **University of Illinois (Urbana-Champaign, IL)**

August 2001 - December 2002; GPA: 3.73  
M.S. in Computer Science Expected December 2002  
Relevant Coursework:

- Advanced Operating Systems
- Theory of Computation
- Security and Cryptography
- Intro to Artificial Intelligence
- Real Time Systems

#### **University of Chicago (Chicago, IL)**

October 1997 - June 2001; GPA: 3.6  
B.A. in Computer Science Received June 2001  
Graduated with General Honors  
Relevant Coursework:

- Programming in Scheme and C++
- Data Structures
- Computer Architecture
- Information Theory and Coding
- Operating Systems
- Discrete Mathematics
- Networks and Distributed Systems
- Algorithms
- Databases
- Complexity Theory
- Scalable Internet Services
- Compilers

### **EXPERIENCE**

#### **IBM**

Raleigh, NC

*Extreme Blue Program Intern*  
June 2002–August 2002

Worked on the VideoGrid project, integrating IBM digital media middleware through web services technologies. For more information about the Extreme Blue Program please see <http://www.ibm.com/extremeblue>.

#### **National Center for Supercomputing Applications (NCSA)**

Urbana, IL

*Graduate Research Assistant*  
August 2001–May 2002, August 2002–December 2002

Developed an authorization framework for Grid-based component systems which builds on existing Grid security protocols.

**Argonne National Laboratory (ANL), Distributed Systems Laboratory (DSL)**

*Research Assistant*

Argonne, IL

June 1998–September 1998, June 1999–August 2001

- Worked on the award-winning Globus project
- Developed Java-based tools and applications for Grid computing as part of the Java CoG Kit [<http://www.globus.org/cog/java>]
- Used Java SSL libraries to develop pure-Java SSL clients and servers for use with the Java CoG Kit and Globus
- Investigated the possibility of an implementation of GSS-API (Generic Security Services API) in Java
- Used the PKCS#11 standard to add smart card support to Java CoG's security libraries

**SKILLS**

Familiar With:

- Windows 95/98/Me/NT/2000/XP, Unix, MacOS
- Web Services Technologies (SOAP, WSDL, UDDI, etc.)
- Apache Axis and IBM's Web Services Toolkit
- Jakarta Ant
- SSL Protocol
- GSS-API (Generic Security Services API)
- PKCS#11 Cryptographic Token Interface Standard
- Mysql/Msqli Database
- CORBA

Computer Languages:

- Java, C, C++, Python, Perl, JavaScript, Visual Basic, Scheme, HTML, SQL

Java-specific:

- Java 2
- JCA (Java Cryptography Architecture)
- JCE (Java Cryptography Extension)
- JSSE (Java Secure Socket Extension)
- JNDI (Java Naming and Directory Interface)
- JDBC Data Access
- JFC (Java Foundation Classes)
- Signed Applets
- Java Web Start

**EXTRACURRICULAR ACTIVITIES**

Founder and President (2000-2001) of the University of Chicago Student ACM (Association for Computing Machinery) Chapter

**PAPERS**

L. Ramakrishnan, H. Rehn, J. Alameda, R. Ananthakrishnan, M. Govindaraju, A. Slominski, K. Connelly, V. Welch, D. Gannon, R. Bramley, S. Hampton, "An Authorization Framework for a Grid Based Component Architecture", Submitted for publication to Grid 2002.

M. Parashar, G. von Laszewski, S. Verma, J. Gawor, K. Keahey, and N. Rehn, "A CORBA Commodity Grid Kit", Concurrency and Computation: Practice and Experience (Grid Computing Environments Special Issue), 2001. <http://aspen.ucs.indiana.edu/gce/C544corbacog/corbacog.pdf>

G. von Laszewski, J. Gawor, P. Lane, N. Rehn, and M. Russell, ""Features of the Java Commodity Grid Kit"", Concurrency and Computation: Practice and Experience (Grid Computing Environments Special Issue), 2001. <http://aspen.ucs.indiana.edu/gce/C536javacog/c536featuresOfCoG.pdf>

Gregor von Laszewski, Ian Foster, Jarek Gawor, Peter Lane, Nell Rehn, Mike Russell, ""Designing Grid Based Problem Solving Environments"", 34th Hawai'i International Conference on System Science, Maui, Jan.3-6, 2001. [http://www.hicss.hawaii.edu/HICSS\\_34/PDFs/ST2CP04.pdf](http://www.hicss.hawaii.edu/HICSS_34/PDFs/ST2CP04.pdf)

## **AWARDS**

- Dean's List 1998, 1999, 2000, 2001
- Recipient of a Foreign Language Acquisition Grant (FLAG), 2000